

CDC Site Visit: Climate-Ready States and Cities Initiative

# Maryland Public Health Strategy for Climate Change

Clifford S. Mitchell, MS, MD, MPH
Director, Environmental Health Bureau
Prevention and Health Promotion
Administration

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#### Site Visit Agenda

- Welcome/Introductions
- Year 1 Update
- Year 2 Work Plan
- Budget and Fiscal Issues
- Lunch
- Follow Up from U MD Modeling Meeting
- Local Partners
- Technical Issues
- Wrap-Up



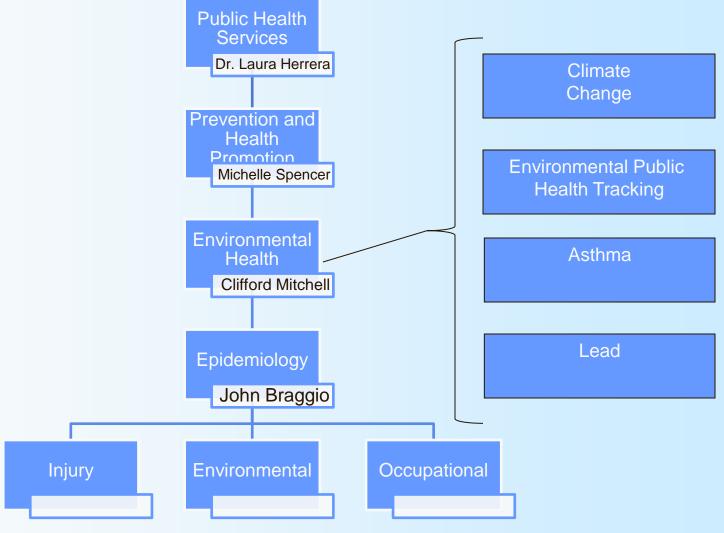
#### Welcome and Introductions

#### PROJECT TEAM

- Maryland Department of Health and Mental Hygiene
- University of Maryland College Park
- CDC
- Other Partners

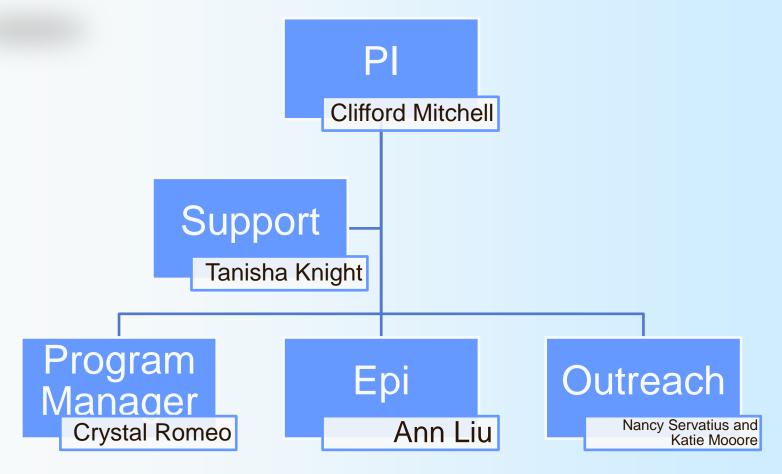


#### Organization





#### Climate Change Project

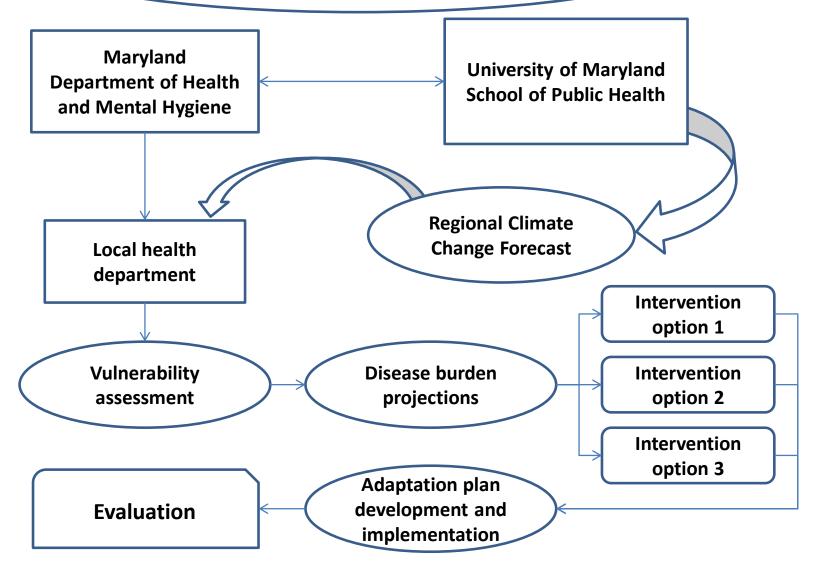


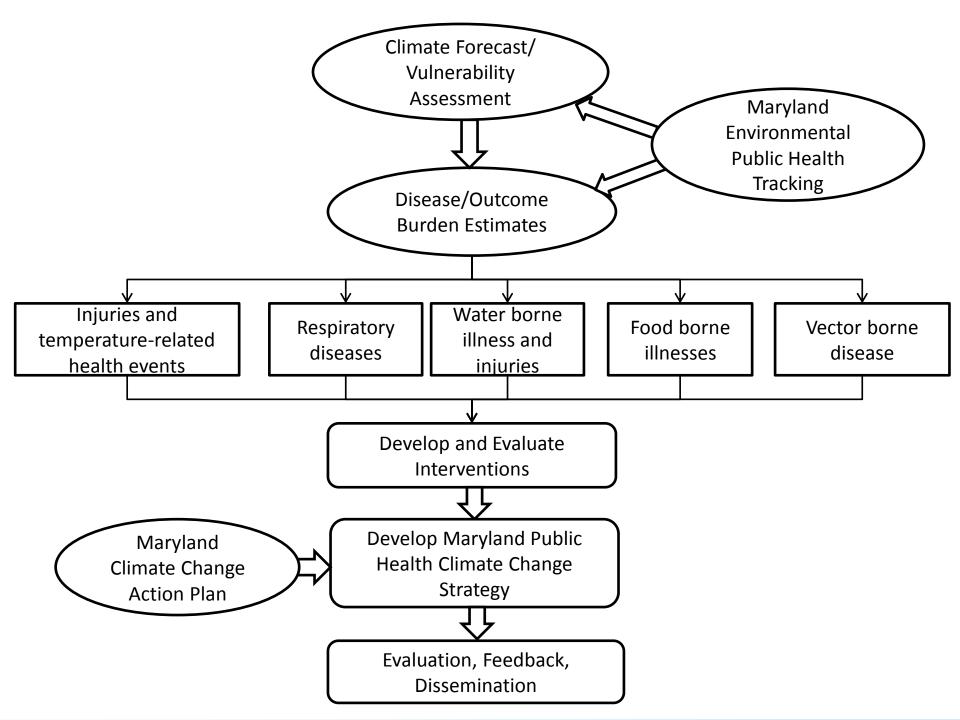


#### Maryland Public Health Strategy for Climate Change

- Based on CDC BRACE framework (building resistance against climate effects)
- 4 year cooperative agreement
- Also operates within context of Maryland Climate Change Action Plan

### Maryland Public Health Climate Change Strategy







Goals	Objectives	Timeline	Performance Metric(s)
1. Prepare a Climate	1.1 Prepare climate forecast	9/1/2012 -	Forecast products for selected
Forecast and		8/31/2013	regional, local jurisdictions
Vulnerability	1.2 Vulnerability assessment	11/1/2012 -	Mapping of vulnerable
Assessment		8/31/2013	populations, quantitative
			vulnerability assessment
2. Project Disease/	2.1 Injuries and Temperature-	9/1/2013 -	Metrics for each selected
Outcome Burden	Related Health Events	3/31/2014	disease or outcome
	2.2 Respiratory Diseases		
	2.3 Water Borne Illness		
	2.4 Food Borne Illness		
	2.5 Vector Borne Disease		
3. Develop and	3.1 Develop interventions	1/1/2014 -	Detailed written description of
<b>Evaluate Public Health</b>	•	8/31/2014	interventions
Interventions	3.2 Assessment of public	3/1/2014 —	Formal health impact
	health interventions using	2/28/2015	assessment of strategies/
	health impact assessment		interventions
	framework		
4. Develop Maryland	4.1 Develop written strategy	3/1/2015 -	Strategy document
<b>Public Health Climate</b>	document within Maryland	8/31/2015	
Strategy	Climate Change Action Plan		
	framework		
	4.2 Obtain feedback from key	9/1/2015 —	Written feedback incorporated
	stakeholders	2/29/2016	in strategy document
	4.3 Adopt and promulgate	3/1/2016 -	Promulgation on DHMH
	strategy	8/31/2016	website, other media
5. Evaluation of	5.1 Develop evaluation	9/1/2014 —	Evaluation using criteria
Maryland Public	framework using common	8/31/2016	adopted by DHMH, Maryland
Health Climate Change	evaluation tools and		Climate Change Commission
Strategy	framework		



### Year 01 Project Review



#### Administrative

- Partnership, MOU with University of Maryland School of Public Health at College Park
  - Project Manager (Crystal Romeo)
  - Forecasting/Modeling Team
  - Outreach



#### Working Group Meetings

- Consists of stakeholders in the Climate Change project
  - 26 professionals from 11 different state, federal, and academic entities
- November 2012
- February 2013
- November 2013, expected



### Survey of Maryland Residents

- Initiative of GMU, Maryland Climate Change Consortium
- Survey of 6,400 randomly selected Maryland residences
- Knowledge and attitudes regarding climate change and public health, alternative energy, hydraulic fracturing, and other public health issues



### Preparation of Climate Forecasts

- MOU with University of Maryland at College Park
  - Develop climate forecast and vulnerability assessments
- Collaboration with NOAA on forecasts for harmful algal blooms and vibrio in Chesapeake Bay



### Environmental Justice Forum

- Co-sponsored meeting with the University of Maryland School of Public Health: April 11-13, 2013
- Focused on regional approaches to climate change and environmental justice in the Mid-Atlantic Region



#### Challenges/Opportunities

- Administration
  - Expand Technical Advisory Group to include more public stakeholders
- Surveillance Data
  - Data access for hospitalization data
  - Data gaps
- Local Health Departments
  - Workforce constraints
  - Great interest
- Regional Approaches



# Year 02 Project Update



#### Summary of Year 02

- Survey results
- Environmental Justice forum
- Modeling and forecast meeting
- Baseline health assessment
- Data acquisition
- Community engagement
- Local Public Health Department minigrants



#### Summary of Year 02

- Local Public Health Department site visits
- Staff Additions



### Survey of Maryland Residents on Climate Change

- Initiative of George Mason University, Maryland Climate Change Consortium
- Survey response of 1,600 Maryland residents
- Knowledge and attitudes regarding climate change and public health, alternative energy, hydraulic fracturing, and other public health issues
- Report published Summer 2013 results available to provide guidance to public health efforts



#### Survey Results

- Air pollution is viewed as the top personal health risk
  - 70% say air pollution is a major or moderate risk to their health
- Obesity, storms and climate change are seen as increasing problems in communities
  - 53% say that obesity has become a more prominent issue in recent years
- Violent Storms and Climate Change
  - 52% and 48% say that both are become more common health problems in their communities



#### Survey Results

- Extreme weather is seen by most as a health risk (79%)
- Protecting water and human health from extreme weather are top priorities that state and local government should make a high priority
  - Public water supplies (86%)
  - People's health (80%)
- Renewable energy sources are seen as healthier
  - Coal, oil and nuclear power are seen as most damaging to people's health (68%, 59%, and 58%)



#### Survey Results

- Majority say that Americans are already harmed by climate change (52%)
- Those most vulnerable to climate change harm are somewhat more likely to feel at risk



### Environmental Justice and Climate Change

 Forum on regional approaches to climate change and environmental justice in the Mid-Atlantic Region



### Environmental Justice and Climate Change

- Great interest in vulnerable populations
- Maryland Commission on Environmental Justice and Sustainable Communities



# Climate Forecast and Modeling Meeting

- Hosted meeting with Modelers on June 28, 2013
- Objectives:
  - To brainstorm about the procedures for the forecast models and obtain comments regarding best practices and general ideas
  - To educate local public health officials about climate forecasting
  - To educate modelers about the temporal and spatial confines of public health responses



# Climate Forecast and Modeling Meeting

#### Attendees:

- Maryland Local County Health Departments (Wicomico, Washington County, Prince Georges counties, and Baltimore City)
- Federal Entities (CDC, NOAA, EPA)
- Academia (UMD SPH, ESSIC)

#### Main Presentations

- Climate Change and Asthma
- About MPHSCC
- Asthma in Wicomico County
- CDC Brace Framework
- Climate Forecasting



# Climate Forecast and Modeling Meeting

#### Take away

- Forecast models will be both long- (15 to 50 yrs) and shortterm (5 to 10+ yrs) at the the county level
- For immediate changes (1-5 yr) a stress test matrix for each county is best or emergency preparedness, i.e. the probability that an extreme event will happen such as localized sea level rise
- Public health decisions are made on an annual temporal scale



#### Baseline Health Assessment

- Environmental Public Health Tracking templates
- Work on hydraulic fracturing/ Marcellus Shale
- State, local health improvement processes



### Data Acquisition



#### Community Engagement

 Some through local health departments, mini-grants



## Local Public Health Department Mini-grants

- Enable public health professionals in local health departments (LHDs) to utilize climate forecast projections
- Help LHDs implement climate mitigation and/or adaptation strategies necessary to protect public health
- Evaluate the mitigation and/or adaptation strategy used to determine the quality of improvement and to incorporate refined inputs



### Local Public Health Department Projects

- Proposals due on September 1, 2013
  - Wicomico County: Asthma Outreach
  - Prince Georges County: unknown
  - Washington County: unknown
  - Baltimore City: unknown
- Regionalism and DC Initiative
  - MD is hosting DC tracking for asthma
  - Look at cross boarder outcomes such as discharges in DC for respiratory outcomes for Maryland residents



### Local Public Health Department Site Visits

- Site visits will be completed by November 2013
- Purpose
  - Review goals of the climate project and the proposed county projects
  - Review summary of forecast and health data available for the projects
  - Discuss other climate change related activities and products



#### Staff Additions

- Ann Liu, PhD, MPH
- Mickey Wu, MPH